Appl. No. 09/556,491 Amdt. dated 08/23/2004 Response to Office Action mailed 04/23/04

In the Claims

Claims 1-35 are canceled.

36. [Previously Presented] A semiconductor workpiece processing method comprising:

providing a semiconductor process chamber;

supplying slurry to the semiconductor process chamber;

monitoring the turbidity of the slurry during the supplying using a sensor, wherein the monitoring comprises:

emitting electromagnetic energy towards the slurry; and receiving at least some of the electromagnetic energy.

- 37. [Original] The method according to claim 36 wherein the supplying comprises using a supply connection and the monitoring comprises monitoring slurry within the supply connection.
- 38. [Original] The method according to claim 37 further comprising coupling the sensor with the supply connection.
 - 39. Canceled.

- 40. [Original] The method according to claim 36 further comprising generating a signal indicative of the turbidity after the monitoring.
- 41. [Original] The method according to claim 36 further comprising insulating the slurry from the sensor.
- 42. [Original] The method according to claim 36 wherein the providing comprises providing a chemical-mechanical polishing process chamber.

Claims 43-52 are canceled.

53. [Original] A semiconductor workpiece processing method comprising: providing a semiconductor processor having a process chamber configured to receive a semiconductor workpiece;

supplying slurry to the process chamber using a connection;
emitting electromagnetic energy towards the connection using a sensor;
receiving at least some of the electromagnetic energy using the sensor; and
generating a signal indicative of turbidity of the slurry responsive to the receiving.

54. [Original] The method according to claim 53 wherein the emitting comprises emitting infrared electromagnetic energy.

- 55. [Original] The method according to claim 53 further comprising substantially insulating the slurry from the sensor.
- 56. [Original] The method according to claim 53 wherein the providing comprises providing chemical-mechanical polishing semiconductor processor.
- 57. [Original] The method according to claim 53 further comprising attaching the sensor to the connection and detaching the sensor from the connection while maintaining the supplying.
- 58. [Original] A semiconductor workpiece processing method comprising: providing a semiconductor processor having a process chamber configured to receive a semiconductor workpiece;

supplying slurry to the process chamber using a connection;

emitting infrared electromagnetic energy using a source;

splitting the infrared electromagnetic energy to direct some of the infrared electromagnetic energy towards the connection;

first receiving at least some of the infrared electromagnetic energy passing through the connection using a first receiver;

generating a feedback signal using the first receiver responsive to the first receiving;

adjusting the emitting via the source responsive to the feedback signal to provide a substantially constant amount of electromagnetic energy to the first receiver;

second receiving at least some of the infrared electromagnetic energy not passing through the connection using a second receiver; and

generating a signal indicative of turbidity of the slurry using the second receiver responsive to the second receiving.

- 59. [Previously Presented] The method according to claim 36 further comprising providing the slurry and the monitoring comprises monitoring after the providing.
- 60. [Previously Presented] The method according to claim 37 wherein the supply connection is configured to supply the slurry in at least a partially horizontal direction.
- 61. [Previously Presented] A semiconductor workpiece processing method comprising:

providing a semiconductor process chamber;

supplying slurry to the semiconductor process chamber;

monitoring the turbidity of the slurry during the supplying using a sensor; and insulating the slurry from the sensor.

62. [Currently Amended] A semiconductor workpiece processing method comprising:

providing a semiconductor process chamber;

supplying slurry to the semiconductor process chamber using a supply connection;

monitoring the turbidity of the slurry <u>within the supply connection</u> during the supplying, wherein the monitoring comprises monitoring using a sensor; and

wherein the supply connection is configured to supply the slurry in at least a partially horizontal direction and the sensor is configured to monitor the slurry while being supplied in the at least partially horizontal direction.

- 63. [Previously Presented] The method according to claim 36 wherein the supplying comprises directly supplying the slurry to the semiconductor process chamber with no modification of a physical property of the slurry after the monitoring.
- 64. [Previously Presented] A semiconductor workpiece processing method comprising:

providing a semiconductor process chamber;

supplying slurry to the semiconductor process chamber; and

monitoring the turbidity of the slurry during the supplying using a sensor; and

wherein the supplying comprises directly supplying the slurry to the semiconductor process chamber with no modification of a physical property of the slurry after the monitoring.

65. [Previously Presented] The method according to claim 53 wherein the supplying comprises directly supplying the slurry to the process chamber with no modification of a physical property of the slurry after passage of the slurry through the connection.